
EMAC LLD

Release Notes

Applies to Product Release: 01.00.03.18
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EMAC LLD version 01.00.03.18

Overview

This document provides the release information for the latest EMAC Low Level Driver which should be used by drivers and application that interface with EMAC IP.

EMAC LLD module includes:

- Pre-compiled library for DSP (Big and Little) Endian of EMAC LLD.
- Source code.
- API reference guide
- Design Documentation

LLD Dependencies

LLD is dependent on following external components delivered in PDK package:

- CSL

New/Updated Features and Quality

Release 1.0.3.18

- 3-Port TSN Ethernet Switch Support
- Bug Fixes

Release 1.0.3.17

- Bug Fixes

Release 1.0.3.16

- Bug Fixes

Release 1.0.3.15

- Bug Fixes

Release 1.0.3.14

- AM65XX : Misra- C cleanup
- Bug Fixes

Release 1.0.3.13

- AM65XX : Added emac_poll_ctrl API
- AM65XX : LLD updates to support multiple TX channels per port
- AM65XX: LLD update to support multiple flows per RX channel per port
- AM65XX: LLD update to support TX time stamping feature.
- Bug Fixes.

Release 1.0.3.12

- Add support for AM65XX.
- Add emac_ioctl API for AM65XX
- Add static variable to store configured MAC address.

Release 1.0.3.10

- Misra- C cleanup.
- Bug Fixes.

Release 1.0.3.9

- Bug Fixes.

Release 1.0.3.8

- Add support for AM574x SOC.
- Bug Fixes.

Release 1.0.3.7

- SoC specific HW attributes support for K1/K2.
- LLD build using makefile infrastructure.
- AM57x M4 I/O benchmark for Ethernet Examples.
- IR Fixes.

Release 1.0.3.6

- Support for omap1137 and omap1138 SOCs.
- IR Fixes.

Release 1.0.3.5

- IR Fixes.

Release 1.0.3.4

- IR Fixes.

Release 1.0.3.3

- IR Fixes.

Release 1.0.3.2

- Initial release of EMAC LLD for K2G support.

Release 1.0.3.1

- Initial release of EMAC LLD for K2G support.

Release 1.0.3.0

- Initial release of EMAC LLD for C6657 support. This release is ported from the existing EMAC LLD designed for the C64x family.
- Added defines for C6657.
- Added EMAC loopback test case and EMAC benchmark example.

Release 1.0.2.0 (and prior)

- Release 1.0.2.0 and earlier of the EMAC LLD are designed for the C64x family. Please refer to BIOS-MCSDK 01_00_00_xx for relevant C64x support.

Licensing

Please refer to the software Manifest document for the details.

Delivery Package

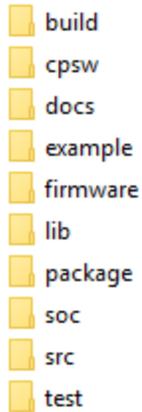
There is no separate delivery package. The EMAC LLD is being delivered as part of PDK.

Installation Instructions

The LLD is currently bundled as part of Processor Software Development Kit (process sdk). Refer installation instruction to the release notes provided for PDK.

Directory structure

The following is the directory structure after the EMAC LLD package has been installed:



The following table explains each individual directory:

Directory Name	Description
ti/drv/emac	The top level directory contains the following:- <ol style="list-style-type: none"> <u><i>XDC Build and Package files</i></u> These files (config.bld, package.xdc etc) are the XDC build files which are used to create the EMAC package. <u><i>Exported Driver header file</i></u> Header files which are provided by the EMAC low level driver and should be used by the application developers for driver customization and usage.
ti/drv/emac/build	The directory contains internal XDC build related files which are used to create the EMAC low level driver package.
ti/drv/emac/docs	The directory contains the EMAC low level driver documentation.
ti/drv/emac/example	The “example” directory in the EMAC low level driver has the benchmark example.
ti/drv/emac/firmware	Contains firmware headers and configuration files
ti/drv/emac/lib	The “lib” folder has pre-built Big and Little Endian libraries for the low level driver along with their <u><i>code/data size information</i></u> .
ti/drv/emac/package	Internal EMAC low level driver package files.
ti/drv/emac/src	Source code for the EMAC low level driver.
ti/drv/emac/test	The “test” directory in the EMAC low level driver has the loopback unit test case which is used by the development team to test the EMAC low level driver.
ti/drv/emac/soc	SOC specific EMAC configuration files for driver configuration.
ti/drv/emac/cpsw	Source code for CPSW/CPTS example which does not utilize this driver for K2G SOC only

Customer Documentation List

lists the documents that are accessible through the **/docs** folder on the product installation CD or in the delivery package.

Table 1 Product Documentation included with this Release

Document #	Document Title	File Name
1	API documentation (generated by Doxygen)	docs/doxygen/emacs.chm
2	Design Document	docs/EMAC_LLD_SDS.pdf
3	Software Manifest	docs/EMAC_Software_Manifest.pdf